



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

March 12, 2021

Kenneth C. Baldwin, Esq.
Jonathan H. Schaefer, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **PETITION NO. 1442** - SR Litchfield, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 19.8-megawatt AC solar photovoltaic electric generating facility on 6 contiguous parcels located both east and west of Wilson Road south of the intersection with Litchfield Town Farm Road in Litchfield, Connecticut, and both east and west of Rossi Road, south of the intersection with Highland Avenue in Torrington, Connecticut, and associated electrical interconnection.

Dear Attorneys Baldwin and Schaefer:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than April 2, 2021. To help expedite the Council's review, please file individual responses as soon as they are available. At this time, consistent with the Council's policy to prevent the spread of Coronavirus, please submit an electronic copy only to siting.council@ct.gov. However, please be advised that the Council may later request one or more hard copies for records retention purposes.

Any request for an extension of time to submit responses to interrogatories shall be submitted to the Council in writing pursuant to §16-50j-22a of the Regulations of Connecticut State Agencies.

Sincerely,

s/Melanie Bachman

Melanie Bachman
Executive Director

MB/RM

c: Ali Weaver, Director Project Development SR Litchfield, LLC

Petition No. 1442

**SR Litchfield, LLC
Interrogatories - Set One
March 12, 2021**

Project Development

1. If the project is approved, identify all permits necessary for construction and operation, and indicate which entity will hold the permit(s).
2. Does the Petitioner have a contract to sell the electricity and renewable energy certificates it expects to generate with the proposed project? If so, to which public utility? If the electricity is to be sold to more than one public utility, provide the percentage to be sold to each public utility.
3. After the 20 year expiration of the two Power Purchase Agreements, what other revenue mechanisms are anticipated for the power produced by the facility?
4. Referring to Petition p. 10, if the project footprint was reduced, leading to a reduced project output that is below 19.8 MW AC, would the Petitioner no longer pursue a solar facility at the proposed site?
5. Referring to Petition p. 13, what ISO-NE Forward Capacity Auction would the Petitioner participate in? What is the capacity commitment period(s)?
6. Referring to Petition p. 15, did the Petitioner receive any comments from the mailers sent out on September 22, 2020. If so, how many abutters responded and how were their concerns addressed?

Proposed Site

7. Is the site parcel, or any portion thereof, part of the Public Act 490 Program? If so, how does the municipal land use code classify the parcel(s)? How would the project affect the use classification?
8. Has the State of Connecticut Department of Agriculture purchased any development rights for the project site or any portion of the project site as part of the State Program for the Preservation of Agricultural Land?
9. Is any portion of the site currently in productive agricultural use? If so, how many acres? Are any portions of the "Project Area" under lease by another party? If yes, when does the lease expire?
10. For the solar array areas proximate to residential areas, provide the distance, direction and address of the nearest property line and nearest off-site residence from the solar field perimeter fence.
11. Petition Appendix J (Phase 1 ESA) states the Site Plan (App. D) is pending. Was site plan completed? If so, please submit. Clarify the differing parcel numbers on pp. 8,9 and 12,13.
12. Petition pp. 18-19 states sheep would be allowed to graze at the site.
 - a. Is there a potential of damage to the panels/wiring from grazing?

- b. Is the specified seed mix for the solar array area specific to livestock grazing?
 - c. Is a shed/shelter necessary/proposed for the site? If so, where would it be located?
 - d. Would livestock grazing increase or decrease project maintenance costs?
 - e. Referring to p. 19, how would livestock grazing increase biodiversity?
 - f. Was livestock grazing discussed at the two community outreach meetings? If so, what comments, if any, were received?
 - g. Does the Petitioner intend to allow livestock grazing in areas adjacent to residences? Were these residences notified that livestock grazing would occur at the site?
 - h. If temporary electric fence is used to create paddocks, what types of safety measures are in place to protect the public and emergency response personnel from electric fence shock hazards?
 - i. The Integrated Vegetation Management Plan (Ex. M) states the site is 38 acres. Does this value only pertain to proposed sheep pasture areas? Please clarify.
13. Is livestock grazing an integral component of the Project or can the Project proceed without livestock grazing?

Energy Output

14. Is the project being designed to accommodate a potential future battery storage system? If so, please indicate the anticipated size of the system, where it may be located on the site, and the impact it may have on the PPAs.
15. Does the design of the Project, including the method of interconnection, allow it to serve as a microgrid?
16. Referring to petition p. 21, it states it is possible to isolate sections of the Project down to the PV module string level to allow for partial power production under the necessary conditions. Is this type of action performed remotely or by manual switching?
17. Do solar facilities present a challenge for the independent system operator for balancing loads and generation (to maintain the system frequency) due to the changing (but not controlled) megawatt output of a solar facility? What technology or operational protocols could be employed to mitigate such challenges?

Site Components and Solar Equipment

18. Is the wiring from the panels to the inverters installed on the racking? If a portion of the wiring is external, how would it be protected from potential damage from weather exposure, vegetation maintenance, or animals?
19. What type of racking system is proposed for the site? (The decommissioning plan mentions a tracker system whereas the petition narrative describes fixed tilt system)
20. Referring to Petition p. 8, what is the slope tolerance for the racking posts? Do driven piles have a different slope tolerance than a ground screw auger installation system?
21. Referring to Petition p. 7, provide more information regarding “additional energy harvesting from the rear side of the modules”. Would the use of bifacial modules allow the facility to produce more power over the course of a day? If so, would this have an effect on the Renewable Energy

certificates sold for this project? Is the module output rating based on mono-facial or bi-facial sunlight exposure?

22. What is the row width of the installed solar panels?
23. Referring to Petition p. 8, does the National Electric Code require barbed wire on top of a seven - foot fence? If not, why was this extra security measure selected for this site? In regards to the statement *with mesh size to be determined but no greater than one and a quarter inch (1.25") in accordance with Siting Council requirements*, please explain what requirement the Petitioner is referring to?
24. What alternative fence designs could be employed at the site? What is the cost differential in the fence design options?
25. Referring to Site Plan C-504- what does the hatched area east of Basin 8/10 represent?
26. Why are 16-foot wide gravel access roads required for a majority of the project if a 12-foot wide road can be utilized in the northern array area?

Interconnection

27. Is the project interconnection required to be reviewed by ISO-NE?
28. Is the existing distribution three-phase or would it have to be upgraded from single-phase to three-phase?
29. What is the status of the Facilities Study referenced on p. 12 of the Petition?

Public Safety

30. Is the project designed to comply with CT State Fire Prevention Code, Ground Mounted Photovoltaic System Installations section 11.12.3? Has the Petitioner had any discussions with the local Fire Marshal regarding the site design?
31. Are there any drinking water wells on the site or in the vicinity of the site? If so, how would the Petitioner ensure wells and/or water quality are not impacted from construction activities?
32. Describe fluid leak/spill containment for the proposed transformer equipment.
33. Does the Petitioner intend to consult with the DEEP Dam Safety program regarding permitting requirements, if any, for the proposed stormwater basins?
34. Has the manufacturer of the selected solar panels conducted Toxicity Characteristic Leaching Procedure (TCLP) testing to determine if the panels would be characterized as hazardous waste at the time of disposal? If so, please submit relevant information. If the project is approved, would the Petitioner commit to the installation of solar modules that are not classified as hazardous waste through TCLP testing?

Environmental

35. What is the total acreage of woodland on the site property?
36. Different tree clearing quantities are provided in the Petition narrative (40 acres) and Exhibit L-Tree Analysis (30 acres). Please clarify.
37. Petition p. 6 states 4.8 acres of tree clearing would occur around the periphery of the solar fields to reduce project shading effects. Page 17, states the shading analysis used a tree height of 45 feet. Why was this height selected when the visibility analysis used actual tree measurement that determined tree heights were an average of 75 feet in the Project area?
38. Different wetland disturbance quantities are provided in the Petition narrative (10,000 square feet) and Exhibit V- Stormwater Pollution Control Plan (8,000 square feet). Please clarify.
39. What are the host municipalities' wetland setbacks?
40. Why was a 25-foot wetland setback established for the entire project rather than a qualitative buffer design that accounts for existing disturbance, forested areas and wetland quality?
41. How would Project design/output be affected if the project was designed with a 100-foot wetland buffer?
42. How many acres of the Project Limit of Disturbance occur within the 100-foot buffer of Gulf Stream?
43. Site Plan C-402 shows clearing and construction within the 100-foot buffer of Gulf Stream for Stormwater Basin 8/10. Can the Project be modified to avoid any work within the 100-foot buffer of Gulf Stream, a cold water fishery, as recommended by the *2004 Connecticut Stormwater Quality Manual* and as required by the DEEP *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities*, effective December 31, 2020?
44. The site plans show an underground electric line extending from the solar array east of Rossi Road to the solar array south of Town Farm Road. The proposed route of the electric line traverses a wetland and a tributary of Gulf Stream. How will this line be installed? Describe the amount of clearing/disturbance to wetlands required to install the line.
45. The Site Plans show three bottomless arch culverts to cross watercourses on the site. Describe how the culverts would be constructed. What are anticipated wetland and watercourse impacts from construction? Quantify the amount of tree clearing in wetlands that is necessary to install each culvert.
46. Does the design of the culverts comply with the 2008 DEEP Habitat Conservation and Enhancement Program, Stream Crossing Guidelines?
47. Will the Project require a U.S. Army Corps of Engineers permit/notification for work within wetlands/watercourses?
48. Is it possible to relocate the Rossi Road Access Road to the solar arrays to a location on Wilson Road, south of where Gulf Stream crosses the road? Please explain.

49. The Site Plans show an intermittent watercourse northeast of Stormwater Pond 2 but this watercourse and/or supporting wetlands, was not described or shown on diagrams within the Petition Exhibit U, Wetlands and Habitat report. Please provide information regarding this watercourse.
50. Referring to Petition Exhibit U, Wetlands and Habitat report p. 31, what is the basis of the statement that wood frog habitat can be conserved with wooded CTH that is 50% or greater of the total acreage?
51. Referring to Petition Exhibit U, Wetlands and Habitat report p. 46, it states that the primary water quality control measure at the site is the maintained grass and forb cover associated with the solar array fields. What specific seed mix is proposed that meets water quality goals? Does the seed mix contain pollinator species?
52. How will the continual grazing of the solar field vegetation by sheep impact water quality and stormwater runoff characteristics? Will stormwater runoff be contaminated by animal manure, thereby directly affecting the water quality of downgradient wetlands and watercourses?
53. Referring to Petition pp. 23-25 and Exhibit Y, how many abutting residences would have year round views of the facility?
54. The Site Plans show rows of landscaping along the perimeter fence in select areas. What type of landscaping is proposed and what is the height at planting? At what height would landscaping be maintained? Would these plantings be replaced if they die off? Was a staggered arrangement of plantings considered to create a denser growth pattern to shield views?
55. Where is the nearest parcel used for publicly accessible recreational purposes? Describe the visibility of the proposed project from this parcel.
56. Referring to Petition p. 6, does the Petitioner intend on removing Prime Farmland Soils or Statewide Important Farmland Soils from the site? If not, does the Petitioner intend on removing the top layers of soil for site re-use?
57. Is any of the prime farmland soil at the site being stockpiled for re-application during project decommissioning? If so, estimate the quantity of soil to be stockpiled and provide the stockpile locations.
58. Referring to Site Plan C-600, can the security fence along the Rossi Road Access Road 1 culvert crossing of Gulf Stream be eliminated to facilitate wildlife movement along the stream corridor?
59. Can another location for a laydown area at the site be developed to avoid disturbance to the 100-foot vernal pool envelope at VP-01?
60. What would be the minimum area of meadow required to support a successful breeding pair of bobolink and savannah sparrow?
61. Referring to Petition Appendix U, p. 41 clarify the Conclusion statement *that it is unlikely that any of the species found in the May 2017 letter from DEEP's NDDB occur or breed at the subject site* if the preceding section states the red bat and hoary bat are likely to utilize the site?

62. The Greenhouse Gas (GHG) Assessment in Appendix M of Council Petition No. 1352 compared the life cycle GHG emissions from a solar project to a scenario where the solar project is avoided and an equivalent amount of natural gas-fired electric generation operated for the estimated life of the solar facility. For the proposed project, how would the net GHG emissions (or reduction) over the life of the solar facility and carbon debt payback be affected under this natural gas-fired generation versus proposed solar generation scenario?
63. Please submit photographic site documentation with notations linked to the site plans or a detailed aerial image that identify locations of site-specific and representative site features. The submission should include photographs of the site from public road(s) or publicly accessible area(s) as well as Site-specific locations depicting site features including, but not necessarily limited to, the following locations as applicable:

For each photo, please indicate the photo viewpoint direction and stake or flag the locations of site-specific and representative site features. Site-specific and representative site features include, but are not limited to, as applicable:

1. wetlands, watercourses and vernal pools;
2. forest/forest edge areas;
3. agricultural soil areas;
4. sloping terrain;
5. proposed stormwater control features;
6. nearest residences;
7. Site access and interior access road(s);
8. utility pads/electrical interconnection(s);
9. clearing limits/property lines;
10. mitigation areas; and
11. any other noteworthy features relative to the Project.

A photolog graphic must accompany the submission, using a site plan or a detailed aerial image, depicting each numbered photograph for reference. For each photo, indicate the photo location number and viewpoint direction, and clearly identify the locations of site-specific and representative site features show (e.g., physical staking/flagging or other means of marking the subject area).

The submission shall be delivered electronically in a legible portable document format (PDF) with a maximum file size of <20MB. If necessary, multiple files may be submitted and clearly marked in terms of sequence.

Facility Construction

64. Referring to the Stormwater Pollution Control Plan, the amount of land disturbance on p. 3 and on Sheet C 002 does not match. Please clarify.
65. How many acres of the site require re-grading? What is the purpose of the site grading as shown on the Site Plans? Why can't existing grades be utilized to a greater extent to minimize soil disturbance?
66. The Site Plans indicate there is excess cut and debris from stonewall/stone pile removal. Where will this excess material be disposed of?

67. What areas of the site have post-construction slopes that are equal to or greater than 15%?
68. According to the Petition, the Petitioner filed for a Stormwater Permit on October 20, 2020. The submitted Stormwater Pollution Control Plan (Ex. V) contains no mention of Draft Appendix I, Stormwater Management at Solar Array Construction Projects. Has the project been designed to conform to Draft Appendix I? If so, list measures that were incorporated into the Project design.
69. What effect would runoff from the drip edge of each row of solar panels have on the site drainage patterns? Would channelization below the drip edge be expected? Are energy dissipators, as depicted in DEEP's draft Appendix I, Stormwater Management at Solar Array Construction Projects-Figure 2, proposed for this Project? If not, why not?
70. Referring to Petition Exhibit V pp. 4-5 Construction Sequence- how will the Petitioner cross wetlands/watercourses to access areas for the construction of stormwater basins (Initial Clearing and Grubbing Phase) before the access road arch culverts are installed (Site Construction Phase)?
71. Referring to Petition Exhibit V pp. 4-5 Construction Sequence, what is the time interval between the completion of grubbing/grading and stabilization (Initial Clearing and Grubbing Phase #6) and the commencement of the Site Construction Phase?
72. The stormwater basins are specified as "pond" detention basins. What specific types of stormwater ponds are being proposed at this site?
73. The Site Plans (C-402) show reinforced concrete pipe (RCP) outlets extending from Stormwater Ponds 2 and 7 into wetland areas. Why was a direct wetland discharge point chosen? The Site Plans do not include any construction details for the RCPs. Provide construction details including excavation and site clearing information.

Maintenance/Decommissioning

74. Provide a post-construction Operations and Maintenance Plan that includes provisions for vegetation management within and outside the array areas that incorporates mowing/vegetation management restrictions related to listed-species, and inspection/corrective action protocols for site equipment, stormwater features, and landscaping.
75. Would the installed solar panels require regular cleaning or other, similar, maintenance? If so, describe cleaning procedures including substances used. Would this maintenance activity have any impacts to water quality?
76. Would the Petitioner remove snow that accumulates on the panels? Would snow accumulation on the solar panels affect the output of the facility? Under what weather circumstances would snow be removed? Describe snow removal methods.
77. How would sediment be removed and transported from stormwater features? Where would sediment be disposed of?
78. Would the Petitioner store any replacement modules on-site in the event solar panels are damaged or are not functioning properly? If so, where?

79. What precautions would be taken to ensure any application of herbicide does not affect down gradient wetland/watercourse resources?
80. The Project Decommissioning Plan (Ex. D) did not mention the stormwater management system. Provide information as to what procedures, if any, would be used to remove the stormwater management system.